

ABSTRACT OF THE DISCLOSURE

A system is provided for protecting a wavelength division multiplexing optical communications network against communication failures at the link, wavelength and fiber layers. The system includes failure detectors for detecting communication failures of the network and for generating failure signals in response thereto, and protection switching elements for receiving the failure signals and controlling the protection switching in response thereto. The system also includes a first set of intralayer communication channels within each of the link, wavelength and fiber layers for sending the failure signals between the failure detectors and the protection switching elements, and a second set of interlayer communication channels between adjacent ones of the link, wavelength and fiber layers for sending the failure signals between the failure detectors and the protection switching elements.

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